

monitored number of outstanding I/O requests for at least a portion of each of said at least two storage devices or at least two partitioned groups of storage devices;

5                   wherein said estimated total number of viewers for each of said at least two storage devices or at least two partitioned groups of storage devices is determined based at least in part on said estimated total number of viewers being served by at least a portion of each of said at least two storage devices or at least two partitioned groups of storage devices, and said estimated workload distribution for each of said respective at least two storage devices or at least two partitioned groups of storage devices; and

10                  wherein said estimated aggregated data consumption rate for each of said at least two storage devices or at least two partitioned groups of storage devices is determined based at least in part on said estimated aggregated data consumption rate for each of said at least two storage devices or at least two partitioned groups of storage devices, and estimated workload distribution for each of said respective at least two storage devices or at least two partitioned groups of storage devices.

15                  164. The system of claim 161, wherein said I/O resource manager has knowledge of the number of plex for each logical volume contained on said at least two storage devices or at least two partitioned groups of storage devices; wherein said monitoring agent is capable of monitoring a number of outstanding I/O requests for each said plex; and wherein said storage system workload monitor is capable of:

20                  25                  monitoring a number of viewers being served by each logical volume contained on said at least two storage devices or at least two partitioned groups of storage devices, monitoring the aggregated data consumption rates for said number of viewers being served by each logical volume contained on said at least two storage devices or at least two partitioned groups of storage devices;

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5 determining an estimated total number of viewers for each said plex based at least in part on said monitored number of plex for each logical volume and said monitored number of viewers for each logical volume;

10 5 determining an estimated aggregated data consumption rate for each said plex based at least in part on said monitored number of plex for each logical volume and said monitored aggregated data consumption rates;

15 10 determining an estimated total number of viewers for each of said at least two storage devices or at least two partitioned groups of storage devices based at least in part on said estimated total number of viewers for each said plex and said monitored number of outstanding I/O requests for each said plex; and

20 15 determining an estimated aggregated data consumption rate for each of said at least two storage devices or at least two partitioned groups of storage devices based at least in part on said estimated aggregated data consumption rate for each said plex and said monitored number of outstanding I/O requests for each said plex.

25 20 165. The system of claim 164, wherein said monitoring agent is further capable of determining a maximal number of outstanding I/O requests for each said plex; and wherein said storage system workload monitor is capable of:

30 25 determining an estimated workload distribution across said at least two storage devices or at least two partitioned groups of storage devices based at least in part on said monitored maximal number of outstanding I/O requests for each said plex;

30 determining an estimated total number of viewers for each of said at least two storage devices or at least two partitioned groups of storage devices based at least in part on said estimated total number of viewers for each said plex and said estimated workload

distribution for each of said respective at least two storage devices or at least two partitioned groups of storage devices; and

5 determining an estimated aggregated data consumption rate for each of said at least two storage devices or at least two partitioned groups of storage devices based at least in part on said estimated aggregated data consumption rate for each said plex and estimated workload distribution for each of said respective at least two storage devices or at least two partitioned groups of storage devices.

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166. The system of claim 164, wherein each of said storage devices comprise storage disk drives.

167. The system of claim 162, wherein said storage system workload monitor is capable of determining a maximal total number of viewers per storage device and a maximal aggregated data consumption rate storage device or per partitioned group of storage devices.

20 168. The system of claim 167, wherein said I/O resources comprise I/O capacity; and wherein said I/O resource manager is capable of modeling said I/O capacity based at least in part on said determined maximal total number of viewers per storage device or per partitioned group of storage devices, and said determined maximal aggregated consumption rate per storage device.

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169. The system of claim 168, wherein said at least one of said I/O resources further comprise buffer memory space of said information management system; and wherein said I/O resource manager is capable of managing said I/O resources by balancing said I/O capacity with said buffer memory space to ensure uninterrupted delivery of said continuous media data to said 30 plurality of viewers from said at least two storage devices or said at least two partitioned groups